

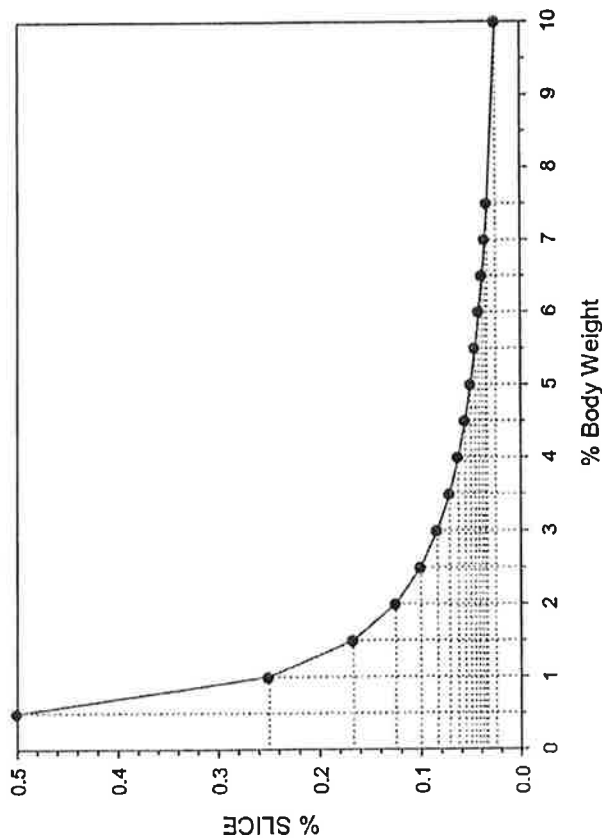
**Table 1.** To determine amount of SLICE® Premix to add to either a 50-lb or 20-kg bag of fish feed, find the percent body weight (%BW) at which fish will be fed, go to the 4<sup>th</sup> or 5<sup>th</sup> row of the table, and read the amount (g) of SLICE® Premix to add.<sup>a, b</sup>

	% BW	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	7.5	10.0
% SLICE		0.5	0.25	0.1667	0.125	0.1	0.0833	0.0714	0.0625	0.0556	0.05	0.0455	0.0417	0.0385	0.0357	0.0333	0.025
Amount of SLICE® Premix (g) to add to either a 50 lb or 20 kg bag of feed																	
50 lb	113.4	56.70	37.81	28.35	22.68	18.89	16.19	14.18	12.61	11.34	10.32	9.45	8.73	8.10	7.55	5.67	
20 kg	100.00	50.00	33.34	25.00	20.00	16.66	14.28	12.50	11.12	10.00	9.10	8.34	7.70	7.14	6.66	5.00	

<sup>a</sup> Amount of SLICE® Premix (g) to add to a specific amount (g) of feed = [(amount of feed to be treated, g) x (% SLICE® Premix to add)]

<sup>b</sup> If the % body weight you desire is not listed on the table, refer to Section IV.A.2. for the calculation to determine % SLICE®.

**Figure 1.** Relation between percent body weight (% BW) and percent SLICE® Premix (% SLICE) to add to fish feed to achieve a dosage of 50 µg emamectin benzoate/kg fish biomass/day.



Miscellaneous Operating Procedures

ORIGINAL

I. **TITLE:** Procedure for calculating and top-coating SLICE® onto feed

II. **DRUG INFORMATION:**

A. Product name: SLICE® Premix (0.2% active emamectin benzoate; EB)

B. Manufacturer: Schering-Plough Animal Health Corporation  
10488 South 136<sup>th</sup> Street  
Omaha, NE 68138

III. **PRECAUTIONS:**

A. Before handling SLICE® Premix, be familiar with the MSDS.

B. Before top-coating SLICE® Premix onto feed, be trained to safely and properly use the Marion Laboratory Mixer according to SOP INST 126.

IV. **PROCEDURE:**

A. Calculations

**Note:** Unless otherwise stated, a % sign after a number always indicates the number preceding the % sign should be divided by 100 before calculating the equation.

1. Amount of feed needed for treatment  
 $(\# \text{ of fish to be treated}) \times (\text{mean weight of fish, g}) \times (\text{feeding rate, \% body weight}) \times (\text{treatment period, 7 days}) = \text{g of total feed}$

a. Example:

$(6000 \text{ fish to be treated}) \times (4.26 \text{ g/fish}) \times (1.5\% \text{ body weight}) \times (7 \text{ d}) = 2,684 \text{ g of total feed (round up to 3,000 g = 3 kg)}$

b. For best results, make at least 5 kg of feed in the Marion Mixer (mixer holds up to 12 kg of feed).

2. Percentage of SLICE<sup>®</sup> Premix needed:  
 $(\text{desired dosage}^*) / [(\% \text{ active ingredient}^{**}) \times (\text{feeding rate, \% body weight}^{***})] = \% \text{ SLICE}^{\text{®}} \text{ Premix}$

\* desired dosage = 0.05 mg EB/kg fish biomass/d (*constant*)

\*\* % active ingredient = 0.2% active (*constant*)

\*\*\* The only number you need to plug into this equation is the % body weight (feeding rate) to feed your fish.

- a. Example:  
 $(0.05 \text{ mg EB/kg fish/d}) / [(0.2\%) \times (1.5\% \text{ body weight})] =$   
0.167% SLICE<sup>®</sup> Premix in feed

**Note:** For calculation in Example 2a, do not divide percentages by 100 before multiplying, just use the number (i.e., 1.5% = 1.5).

- b. Make at least 5 kg of feed in the Marion Laboratory Mixer (Section IV.A.1.a):  
 $(5000 \text{ g feed}) \times (0.167\% \text{ SLICE}^{\text{®}} \text{ Premix}) = 8.35 \text{ g SLICE}^{\text{®}}$   
Premix to add to 5 kg of feed

3. Amount of fish oil needed:  
 $(\text{total amount of fish feed, g}) \times (0.5\%) = \text{g of fish oil to spray onto feed}$

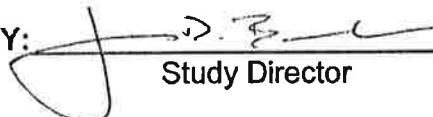
- a. Example:  
 $(5,000 \text{ g feed}) \times (0.5\%) = 25 \text{ g of fish oil}$
- b. Assume 1 mL of fish oil weighs 1 g; after weighing out appropriate amount, transfer to a spray bottle and warm in microwave for ~20 seconds so oil can be easily sprayed.

**B. Top-coating SLICE<sup>®</sup> Premix onto feed**

1. Pre-measure all ingredients (fish feed, SLICE<sup>®</sup> Premix, and fish oil).
2. Add appropriate amount of feed to mixer (between 5 and 12 kg).
3. Turn on mixer and slowly add SLICE<sup>®</sup> Premix near the center of the mixer.
4. After all SLICE<sup>®</sup> Premix has been added, allow mixer to run for ~1 minute.

5. Using a hand-held spray bottle, spray warmed fish oil as uniformly as possible over the feed.
6. After all the fish oil has been added, allow mixer to run for ~1 minute.
7. Unmixed materials, which may be trapped in the discharge valve pocket should be bled from the valve, returned to the mixer, and remixed for ~30 seconds.
8. Please refer to SOP INST 126 for cleaning and maintenance of the Marion Laboratory Mixer after each use.

APPROVED BY:  DATE: 5/25/2011  
Management

APPROVED BY:  DATE: May 25, 2011  
Study Director